Please amend the claims as follows:

1. (currently amended) In a system having a plurality of computers each having data sets stored thereon, a method of assigning a computer to service a request for a data set, said method comprising the steps of:

(a) providing a neural network having at least an input layer having J input nodes and an output layer having K output nodes, each of said output nodes associated with one of said computers, and associated weights w(j,k) between each said input node and each said output node;

(b) receiving a request for particular data set ~~I~~;

(c) ~~imputing~~ inputting to said input layer an input vector having an entry R(I) at input node I, said entry R(I) being dependent upon a ~~the~~ number of requests for ~~the requested~~ said particular data set over a predetermined period of time; and

(d) selecting a computer ~~assignment~~ associated with a selected one of said output nodes to service said particular data set ~~data request~~, where said selected output node is associated with a specific weight, said specific weight selected to minimize a predetermined metric measuring ~~the~~ a distance between said vector entry R(I) and ~~the~~ said weights(j ~~I~~,k), where j=I, associated with said input node I and said output nodes;

(e) updating said specific weight by modifying said specific weight with a first factor dependent said metric distance between said vector entry R(I) and said specific weight and a second factor dependent upon a means to balance a load across a subset of said output nodes.

2-4 (canceled)

5. (currently amended) In the system of claim 1,

~~The method of claim 1~~ where said means to balance a ~~the~~ load across a subset of said output nodes is dependent upon a ~~the~~ number of data requests serviced by said subset of said output nodes over said predetermined period of time divided by ~~the~~ a number of output nodes in said subset of said output nodes.

6. (currently amended) In a system having a plurality of computers each having data sets stored thereon, a method of assigning a computer to service a request for a data set, said method comprising the steps of:

(a) providing a neural network having at least an input layer having J input nodes and an output layer having K output nodes, each of said output nodes associated with one of said computers, and associated weights w(j,k) between each said input node and each said output node;

(b) receiving a request for particular data set;

(c) inputting to said input layer an input vector having an entry R(I) at input node I, ~~The method of claim 2~~ wherein said R(I) is proportional to a ~~the~~ ratio of ~~(the~~ a number of previous requests for ~~the requested~~ said particular data set ~~)~~ ~~and~~ to ~~(the~~ a number of previous requests for a subset of all requested data sets ~~)~~, over said predetermined period of time~~.~~ ;

(d) selecting a computer associated with a selected one of said output nodes to service said request for said particular data set, where said selected output node is associated with a specific weight, said specific weight selected to minimize a predetermined metric

measuring the distance between said vector entry R(I) and said weights(j,k), where j=I, associated with said input node I and said output nodes; and

(e) updating said specific weight according to a predetermined update rule.

7. (currently amended) In a system having a plurality of computers each having data sets stored thereon, a method of assigning a computer to service a request for a data set, said method comprising the steps of:

(a) providing a neural network having at least an input layer having J input nodes and an output layer having K output nodes, each of said output nodes associated with one of said computers, and associated weights w(j,k) between each said input node and each said output node;

(b) receiving a request for particular data set;

(c) inputting to said input layer an input vector having an entry R(I) at input node I, said entry R(I) being dependent upon a number of requests for said particular data set over a predetermined period of time and

(d) selecting a computer associated with a selected one of said output nodes to service said data request, where said selected output node, ~~The method of claim 2 wherein each output node~~ is associated with a neighborhood of other output nodes and said output node is associated with a specific weight, said specific weight selected to minimize a predetermined metric measuring a distance between said vector entry R(I) and said weights (j,k), where j=I, associated with said input node I and said output nodes; and

(e) updating said specific weight with a predetermined update rule, and said step of updating said specific weight includes updating each said weight w(j,k) in said neighborhood of said output node associated with said specific weight.

8. (currently amended) In a system having a plurality of computers each having data sets stored thereon, a method of assigning a computer to service a request for a data set, said method comprising the steps of:

(a) providing a neural network having at least an input layer having J input nodes and an output layer having K output nodes, each of said output nodes associated with one of said computers, and associated weights W(j,k) between each said input node and each said output node;

(b) receiving a request for particular data set;

(c) inputting to said input layer an input vector having an entry R(I) at input node I, said entry R(I) being dependent upon a number of requests for said particular data set over a predetermined period of time and

(d) selecting a computer associated with a selected one of said output nodes to service said request for said particular data set, where said selected output node is associated with a specific weight, said specific weight selected to minimize a predetermined metric measuring a distance between said vector entry R(I) and said weights W(j,k), where j=I, associated with said input node I and said output nodes; and

(e) updating said specific weight ~~The method of claim 2 where said update is~~ according to the formula $W(I,j)=W(I,j) +\text{alpha}((R(I)-w(I,j)) + \text{beta}(\sum W(i,k) -\text{gama}*W(I,j))$, where alpha, beta and gama are pre-determined constants.

9. (currently amended) The system of ~~The method of step~~ claim 1 wherein said input vector's components, other than said entry ~~component~~ R(I) associated with said input node I, are of value zero.

10.-12 (canceled)

13. (currently amended) ~~The method according to~~ The system of claim 1 further comprising the step of transmitting said request for said particular data set to said ~~server~~ selected computer. ~~associated with said server assignment~~.

14. – 15 (canceled)